AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Claims 1-15. (Canceled)

16. (Currently Amended) A polymerization initiator for a cationically polymerizable organic substance, wherein said polymerization initiator ~~comprises~~consisting of a crystalline ion-association substance having the general formula (I):

$$[\{C_5(R^1)_n\}_{2m}M_m]^{L+}[\{B(R^2)_4\}^-]_L$$

wherein M is a transition metal of center nucleus; C_5 is a cyclopentadienyl group; R^1 is selected from the group consisting of alkyl group, cycloalkyl group, alkoxy group, aryl group, dialkyl group, silyl group, acyl group, cycloalkenyl group, amino group, carboxyl group, organoboranyl group, phosphino group, aldehyde group, hydroxyl group, vinyl group and alkylene group; n is a number within range of 0 to 3; m is either 1 or 2; L is either 1 or 2; R^2 is a ligand coordinated to boron atom (B), and the four R^2(s) are the same to each other.

Claims 17-18 (Canceled)

19. (Previously Presented) The polymerization initiator claimed in claim 16, wherein said transition metal of center nucleus (M) of said general formula (I) is selected from the group consisting of Ti, Zr, Fe, Ru, Os, Hf, V, Cr, Mo and W.

20. (Canceled)

21. (Previously Presented) The polymerization initiator claimed in claim 16, wherein a metallocene derivative cation having mono-nucleus structure or di-nucleus structure which constitutes the crystalline ion-association substance having the general formula (I) is selected from the group consisting of acetyl ferrocenium cation, tert.-amyl ferrocenium cation, benzoyl ferrocenium cation, n-butyl ferrocenium cation, cyclohexenyl

ferrocenium cation, cyclopentenyl ferrocenium cation, 1,1'-diacetyl ferrocenium cation, 1,1'-di-n-butyl ferrocenium cation, N,N-dimethylaminomethyl ferrocenium cation, 1,1'-dimethyl ferrocenium cation, ethyl ferrocenium cation, (dihydroxyboranyl) ferrocenium cation, 1-hydroxyethyl ferrocenium cation, hydroxymethyl ferrocenium cation, vinyl ferrocenium cation, 1,1-bis(diphenylphosphino) ferrocene cation, ferrocenium cation, t-butyl ferrocenium cation, dibutyl ferrocenium cation, 1, 2, 4, 1', 2', 4'-hexamethyl ferrocenium cation, tetramethyl ferrocenium cation, hexamethyl ferrocenium cation, bis(cyclopentadienyl) osmium cation, bis(cyclopentadienyl) dicarbonyl titanium cation, vanadocenium cation, bis(indenyl) dimethyl zirconium cation, and diferrocenium derivative cation.

22. (Previously Presented) The polymerization initiator claimed in claim 16, wherein said ligand (R^2) of the said formula (I) is selected from the group consisting of aryl group, halogenated aryl group, halogen haloform aryl group, cycloalkynyl group, halogenated cycloalkyl group, halogenated cycloalkynyl group, cycloalkloxy group, cycloalkenyloxy group, alkadienyl group, alkatrienyl group, alkynyl group, halogenated alkenyl group, halogenated alkadienyl group, halogenated alkatrienyl group, halogenated alkynyl group and heterocyclic group.

23. (Previously Presented) The polymerization initiator claimed in claim 16, wherein said crystalline ion-association substance having the general formula (I) comprises a tetradentate borate complex anion selected from the group consisting of tetrakis(4-fluorophenyl) borate anion, tetrakis(4-fluorobiphenyl) borate anion, tetrakis[3,5-bis(trifluoromethyl)phenyl] borate anion, tetrakis(3,5-difluorophenyl) borate anion, tetrakis[4-(trifluoromethyl)phenyl] borate anion, tetrakis(2,3,5,6-tetrafluorophenyl) borate anion, tetrakis(1,2,3,4,5-pentafluorophenyl) borate anion, tetrakis(3,4,5-trifluorophenyl) borate anion, tetrakis(3-fluoropropane) borate anion, tetrakis[3,5-bis(1,1,1,3,3,3-hexafluoro-2-methoxy-2-propyl)phenyl] borate anion, tetrakis(2,4,6-trifluorophenyl) borate anion, tetrakis(nonafluorobutyl) borate anion, tetrakis(perfluorohexyl) borate anion, tetrakis(perfluoropentyl) borate anion, tetrakis(perfluorooctyl) borate anion, tetrakis(perfluoro-3-methylbutyl) borate anion, tetrakis(perfluoro-5-methylbutyl) borate anion, tetrakis(heptafluoropropyl) borate anion, tetrakis(3,5-dichlorophenyl) borate anion,

tetrakis(4-chlorophenyl) borate anion, tetrakis(benzyl chloride) borate anion, tetrakis(chlorobenzyl) borate anion, tetrakis[2-(perfluorobutyl)ethyl] borate anion, tetrakis[2-(perfluorohexyl)ethyl] borate anion, tetrakis[2-(perfluorooctyl)ethyl] borate anion, tetrakis[2-(perfluoro-7-methylhexyl)ethyl] borate anion, tetrakis[2-(perfluoro-5-methylhexyl)ethyl] borate anion, tetrakis[2,2,3,3-tetrafluoropropyl) borate anion, tetrakis(1H,1H,5H-octafluoropentyl) borate anion, tetrakis(1H-perfluorohexyl) borate anion, tetrakis(1,1-difluoroethyl) borate anion, tetrakis[3,5-bis(trifluoromethyl)benzyl] borate anion, tetrakis[4-(trifluoromethyl)benzyl] borate anion, tetrakis(3,5,-difluorobenzyl) borate anion, tetrakis(4-fluorobenzyl) borate anion, tetrakis(4-ethoxyphenyl) borate anion, tetrakis(4-methoxyphenyl) borate anion, tetrakis(4,5-dimethoxyphenyl) borate anion, tetrakis(4-butylphenyl) borate anion, tetrakis(t-butylphenyl) borate anion, tetrakis(phenyl) borate anion, tetrakis(biphenyl) borate anion, tetrakis(terphenyl) borate anion, tetrakis(mesityl) borate anion, tetrakis(pentamethylphenyl) borate anion, tetrakis(3,5-dimethylphenyl) borate anion, tetrakis(cyclopropyl) borate anion, tetrakis(cyclobutyl) borate anion, tetrakis(cyclohexyl) borate anion, tetrakis(cyclopentyl) borate anion, tetrakis(cyclooctyl) borate anion and tetrakis(phenoxybutyl) borate anion.

24. (Currently Amended) A ~~use of~~reaction system comprising the polymerization initiator claimed in claim 16 ~~in~~and a ~~polymerization of~~ cationically polymerizable organic substance.

25. (Currently Amended) The ~~use~~reaction system as claimed in claim 24, wherein said cationically polymerizable organic substance is a compound ~~or mixture of at least two compounds~~ selected from a group consisting of methylol compounds, ethylenic compounds, polyacetal compounds, organosiloxane compounds, polyamide compounds and heterocyclic compounds or a mixture of at least two compounds selected from a group consisting of methylol compounds, ethylenic compounds, polyacetal compounds, organosiloxane compounds, polyamide compounds and heterocyclic compounds.

26. (Currently Amended) The ~~use~~reaction system as claimed in claim ~~25~~24, wherein said cationically polymerizable organic substance is selected from a group consisting of organosiloxane compounds~~,~~and epoxy compounds and mixtures ~~thereof~~of organosiloxane compounds and epoxy compounds.